

In the Claims:

1-20. (Previously Canceled).

21. (Currently Amended) A method of managing a write request from a first compute node in a storage area network to a first storage node in the storage area network, comprising:

if there is an available direct communication link between the first compute node, a first switch, and the first storage node, then executing the write request from the first compute node to the first storage node using the available direct communication link;

if there is not an available direct communication link between the first compute node and the first storage node, then:

transmitting the write request from the first compute node to a second compute node if there is an available direct communication path from the first compute node to the second compute node and an available direct communication link from the second compute node through the first switch or a second switch to the first storage node, wherein a direct communication path is a path between two compute nodes, possibly passing through a switch, but not passing through a third compute node.

1 **22. (Previously Presented)** The method of claim 21, wherein if
2 executing the write request from the first compute node to the first storage node
3 generates a timeout failure, then:

4 transmitting the write request from the first compute node to a second
5 compute node if there is an available communication path from the first compute
6 node to the second compute node and an available communication path from the
7 second compute node to the first storage node.

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9 **23. (Previously Presented)** The method of claim 22, wherein
10 transmitting the write request from the first compute node to the second compute
11 node comprises encapsulating the write request.

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13 **24. (Previously Presented)** The method of claim 21, further comprising
14 executing the write request from the second compute node to the first storage
15 node.

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17 **25. (Previously Presented)** The method of claim 24, further comprising
18 transmitting an error message from the second compute node to the first compute
19 node if the write request fails.
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1 **26. (Currently Amended)** A method of managing a write request from
2 a first compute node in a storage area network to a mirrored storage data set
3 having a first storage node and a second storage node in the storage area network,
4 comprising:

5 if there are available communication paths between the first compute node
6 and both the first storage node and the second storage node in the mirrored data
7 set, then executing the write request from the first compute node to both the first
8 storage node and the second storage node using the available communication
9 paths;

10 if there are no available communication paths between the first compute
11 node and the first storage node and the second storage node, then invoking an
12 error routine;

13 if there is an available communication path between the first compute node
14 and only one of the first storage node and the second storage node in the mirrored
15 data set, then:

16 executing the write request from the first compute node to the first
17 storage node or the second storage node via the available communication
18 path;

19 determining if a second compute node supports surrogate writes,
20 wherein a surrogate write is a write performed by a node on behalf of
21 another node;

22 transmitting the write request from the first compute node to [[a]]the
23 second compute node determined to support surrogate writes if there is an
24 available direct communication path from the first compute node to the
25 second compute node and an available communication path from the

second compute node through a first switch or a second switch to the first storage node or the second storage node, wherein a direct communication path is a path between two compute nodes, possibly passing through a switch, but not passing through a third compute node.

27. (Previously Presented) The method of claim 26, wherein if executing the write request from the first compute node to the first storage node generates a timeout failure, then:

transmitting the write request from the first compute node to a second compute node if there is an available communication path from the first compute node to the second compute node and an available communication path from the second compute node to the first storage node.

28. (Previously Presented) The method of claim 27, further comprising executing the write request from the second compute node to the first storage node.

29. (Previously Presented) The method of claim 26, wherein if executing the write request from the first compute node to the second storage node generates a timeout failure, then:

transmitting the write request from the first compute node to a second compute node if there is an available communication path from the first compute node to the second compute node and an available communication path from the second compute node to the second storage node.

1 **30. (Currently Amended)** The method of claim 29, further comprising
2 executing the write request from the second compute node to the first storage
3 node.

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5 **31. (Currently Amended)** A method of performing a surrogate write
6 operation in a storage area network, comprising:

7 receiving, at a second compute node, a query from a first compute node,
8 wherein the query identifies a target node in the storage area network for the
9 surrogate write operation;

10 determining if the second compute node supports surrogate writes, wherein
11 a surrogate write is a write performed by a node on behalf of another node;

12 transmitting a reply to the first compute node, wherein the reply includes a
13 signal component indicating there is an available communication path between the
14 second compute node and the target node;

15 wherein the reply indicates whether or not the second compute node
16 supports surrogate writes; and

17 relaying write operations from the first compute node to the target node if
18 there is an available communication path between the second compute node and
19 the target node and the second compute node supports surrogate writes.

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21 **32. (Previously Presented)** The method of claim 31, further comprising
22 determining whether there is an available communication path between the second
23 compute node and the target node.

1 **33. (Currently Amended)** The method of claim 31, wherein relaying
2 write operations from the compute node to the target node comprises:
3 receiving an encapsulated write request from the first compute node;
4 de-encapsulating the encapsulated write request; and
5 executing the write request from the second compute node to the target
6 node.

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8 **34. (Previously Presented)** The method of claim 31, further comprising
9 transmitting a failure signal from the second compute node to the first compute
10 node if the write request from the second compute node to the target node fails.

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12 **35. (Currently Amended)** One or more computer-readable media
13 comprising logic instructions for managing a write request from a first compute
14 node in a storage area network to a first storage node in the storage area network,
15 that, when executed by a processor, cause the processor to perform operations
16 comprising:

17 executing a write request from the first compute node to the first storage
18 node using an available communication path between the first compute node and
19 the first storage node;

20 if there is not an available communication path between the first compute
21 node and the first storage node, then:

22 transmitting the write request from the first compute node to a
23 second compute node if there is an available direct communication path
24 from the first-compute node to the second compute node and an available
25 direct communication path from the second compute node through a first

1 switch or a second switch to the first storage node, wherein a direct
2 communication path is a path between two compute nodes, possibly
3 passing through a switch, but not passing through a third compute node.
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5 **36. (Previously Presented)** The one or more computer-readable media
6 of claim 35, further comprising logic instructions that, when executed by a
7 processor, cause the processor to:

8 determine if executing the write request from the first compute node to the
9 first storage node generates a timeout failure, and if so, then to transmit the write
10 request from the first compute node to a second compute node if there is an
11 available communication path from the first compute node to the second compute
12 node and an available communication path from the second compute node to the
13 first storage node.
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15 **37. (Previously Presented)** The one or more computer-readable media
16 of claim 36, further comprising logic instructions that, when executed by a
17 processor, cause the processor to encapsulate the write request before transmitting
18 the write request from the first compute node to the second compute node.
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1 **38. (Currently Amended)** One or more computer-readable media
2 comprising logic instructions for performing a surrogate write operation in a
3 storage area network that, when executed by a processor, cause the processor to
4 perform operations comprising:

5 receiving, at a second compute node, a query from a first compute node,
6 wherein the query identifies a target node in the storage area network for the
7 surrogate write operation;

8 determining if the second compute node supports surrogate writes, wherein
9 a surrogate write is a write performed by a node on behalf of another node;

10 transmitting a reply to the first compute node, wherein the reply includes a
11 signal component indicating there is an available communication path between the
12 second compute node and the target node;

13 wherein the reply indicates whether or not the second compute node
14 supports surrogate writes; and

15 relaying write operations from the first compute node to the target node if
16 there is an available communication path between the second compute node and
17 the target node and the second compute node supports surrogate writes.

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19 **39. (Previously Presented)** The one or more computer-readable media
20 of claim 38, further comprising logic instructions that, when executed on a
21 processor, cause the processor to determine whether there is an available
22 communication path between the second node and the target node.
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1 **40. (Previously Presented)** The one or more computer-readable
2 media of claim 38, further comprising logic instructions that, when executed on a
3 processor, cause the processor to perform operations comprising:

4 receiving an encapsulated write request from the first compute node;
5 de-encapsulating the encapsulated write request; and
6 executing the write request from the second node to the target node.

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8 **41. (Previously Presented)** The one or more computer-readable media
9 of claim 38, further comprising logic instructions that, when executed on a
10 processor, cause the processor to transmit a failure signal from the second
11 compute node to the first compute node if the write request from the second
12 compute node to the target node fails.